

LANforge WiFi Dual Virtual AP Setup with Limited Stations

Goal: Configure Two virtual APs with a maximum of ten stations each.

Requires at least a two-radio WiFIRE system such as a CT522, CT523 or CT525. This cookbook provides a basic setup to put a Virtual AP on each of two radios. Both APs are operating on separate channels but share the same SSID. We layout a basic constellation of APs in WPA2 mode that quickly fill up and force a station to search multiple channels for a free AP. This is the condition for issuing a Code 17 association refusal. This is not a roaming setup (Wireless Roaming/HS2.0 or 802.11r) because it is not configuring enterprise authentication or roaming specifications.





1. Configure two radios to serve the role of Virtual APs.

4					L	.ANforge	Manager	Version	(5.2.11)				Ŷ	- • ×
<u>C</u> ontrol	<u>R</u> epor	ting]	<u>T</u> ear-Off	f <u>I</u> nfo <u>P</u> lu	ugins									
								Stop All	Re	estart Manag	ger	Re	fresh	HELP
Lovor A	Lavar A Capacia / Tast Mar / Tast Graup / Pasaursa Mar / PDP Links / Event Las / Alarta / Pat Mar / Masagasa													
Status	Lav	er-3	L3 En	dps Vo	IP/RTP	VoIP/RTP	PEndps	Armageddo	n Want	inks Atte	enuators	Collision-E) omains	File-I0
	Disp:	192.1	68.100.	27:0.0	Sr	iff Packets		Clear Coun	ters	Reset Port	Delete			
	Rpt IIr	ner:	ledium	(8 s)		Арріу		view Deta		Create	Modify	Bato	п моату	
			1		-	— All Etherr	net Interfac	es (Ports) f	or all Reso	urces. —	create a vir	tual interfa	ce of some t	type.
Port	Pha	Down		IP	SEC	Alias	RX Bytes	RX Pkts	Pps RX	bps RX	TX Bytes	TX Pkts	Pps TX	bps T.
1.1.0			192.16	58.100.42	0	eth0	2,293	14	1	2,533	23,054	19	2	25,4
1.1.1			0.0.0.0)	0	eth1	0	0	C	0 0	0	0	0	
1.1.2			0.0.0.0)	0	wiphy0	0	0	C	0 0	0	0	0	
1.1.3			0.0.0.0)	0	wiphyl	0	0	C	0 0	0	0	0	
1.1.4			0.0.0.0)	0	wiphy2	0	0	C	0 0	0	0	0	
														•
Logged	in to:	kedte	st:4002	as: Adm	in									

A. Start at the Ports tab. We will configure our second ethernet port as the upstream port for the virtual APs.

<u>\$</u>	e	th1 (kedtest.car	ndelatech.com)	Configure Sett	tings	;	↑ _ □ >	
	Port Status Information							
Curr	Current: LINK-UP 1000bt-FD AUTO-NEGOTIATE Flow-Control TSO GSO GRO							
Drive	er Info: Port Type	e: Ethernet Driver:	e1000e(2.2.14-k)	Bus: 0000:04:00.	.0 Cu	r: 2.5GT/s x1 Max: 2.5GT/s	×l	
	Port Configurables							
Enable		General Int	erface Settings		- 1	Port Rates		
✓ Set IP Info✓ Set IP6 Info						○ 10bt-HD ○ 10bt-FD ○ 100bt-HD	Advertise Rat	
Set IF Down	DHCP-IPv6	☑ DHCP Release	Down	🗌 Aux-Mgt		O 100bt-FD	🖌 10bt-FD	
Set MAC	DHCP-IPv4	Secondary-IPs	DHCP Client ID:	None	-	O 1000-FD	🗾 100bt-HD	
Set TX Q Len	DNS Servers:	BLANK	Peer IP:	NA		O 10G-FD	🖬 100bt-FD	
Set MTU	IP Address:	10.26.1.3	Global IPv6:	AUTO		S Addriegonate	🗹 1000-FD	
Set Offload	IP Mask:	255.255.255.0	Link IPv6:	AUTO		Renegotiate	🔲 10G-FD	
Set Rate Info	Gateway IP:	10.26.1.2	IPv6 GW:	AUTO		Restart Xcvr	Flow-Control	
	Alias:		MTU:	1500		PROMISC	Offload	
Set Rx-All/FCS	MAC Addr:	00:90:0b:2f:0a:0f	TX Q Len	1000		RX-ALL	✓ TSO Enabled	
Set Bridge Info	Br Cost:	Ignore 🗖	Priority:	Ignore	-	RX-FCS	UFO Enabled	
Set CPU Mask	Rpt Timer:	fast (3 s)	• Watchdog:	0	-	Bypass NOW!	✓ GSO Enabled	
Services	CPU Mask:	NO-SET	WiFi Bridge:	NONE		Bypass Power-UP	LR0 Enabled	
HTTP		·		L		Bypass Power-DOWN	GRO Enabled	
FTP						Bypass Disconnect		
1						2.		
	Print Vie	w Details	Probe Sync	Apply		OK Cancel	it do not close the c	

- A. Highlight port eth1 and click Modify
- B. Set the IP address to 10.26.1.3
- C. and the netmask to 255.255.255.0
- D. with a gateway address of the 10.26.1.2. (This gateway address matches the eth1 port of a separate system that hosts stations.
- E. Click **OK**

B. In the **Ports** tab, select radios **wiphy0**, **wiphy1** and click **Modify**. You will get two modify windows that you will want to place side by side.

Pott Configurables Enable General Interface Settings Sett IP Info Set IP Info DHCP-IPvs DHCP-IPvs <th>wiphy0 (kedtest.c Current: 1 Driver info: 1</th> <th>andelatech.com) Configure Sett 🛃 Port Status Information JINK-DOWN NONE Port Type: WIFI-Radio Driver: ath9k()</th> <th>wiphy1</th> <th>(kedtest.can Current: LINk Driver Info: Port</th> <th>delatech.com) C Port Status Inform C-DOWN NONE t Type: WIFI-Radio</th> <th>onfigure Settir ation Driver: ath9k() Bi</th> <th>ngs</th> <th>↑_ □ X</th>	wiphy0 (kedtest.c Current: 1 Driver info: 1	andelatech.com) Configure Sett 🛃 Port Status Information JINK-DOWN NONE Port Type: WIFI-Radio Driver: ath9k()	wiphy1	(kedtest.can Current: LINk Driver Info: Port	delatech.com) C Port Status Inform C-DOWN NONE t Type: WIFI-Radio	onfigure Settir ation Driver: ath9k() Bi	ngs	↑_ □ X
	Enable Set IP Info Set IP for Set IF Down Set MAC Eset TX Q Len Set MTU Set Offload Set PROMISC Max-VIFs: 2 Country: Channel/Fr Antenna: RTS: Verbose	Port Configurables General Interface Settings A SecondaryIPS DHCP Release DHCP Client II SecondaryIPS DHCP Client II SecondaryIPS SecondaryIPS DHCP Client II SecondaryIPS SecondaryIPS DHCP Client II SecondaryIPS Secondary	Enable Set IP Info Set IP 6 Info Set IF Down Set MAC Set TX Q Len Set Offoad Set Offoad Set Offoad	DHCP-IPv6 DHCP-IPv4 DNS Servers: IP Address: IP Address: IP Address: Alias: Mac Addr: Rpt Timer: Max-VIFs: 2048 Country: Channel/Frequ Antenna: RTS: Verbose Do	Port Configurabl General Int DHCP Release Secondary-IPs BLANK 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0 0 0 0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	es erface Settings own DHCP Client ID: Peer IP: Global IPv6: Link IPv6: IPv6 GW: MTU: TX: VHFi Bridge: Settings 48 Max-APs: 8 St States * hz: V T	Aux-Mgt NA AUTO AUTO AUTO O O NONE Tx-Power: DEFAULT	

- A. Set the channel of wiphy0 to 36
- B. and the channel of wiphy1 to 44
- C. Click **OK** in both windows.
- C. Time to create the first virtual AP. In the **Ports** tab, select wiphy0 and click **Create**.

4		(Create VLANs o	on Port: 1.1.2		↑ _ □ ×
A	O MAC-VLAN	○ 802.1Q-VLAN ○ Red	irect 🔷 Bridge	GRE Tunnel		
	WiFi STA (🔾 WiFi VAP 🔷 WiFi Monit	or			
2	Shelf:	1	Resource:	1 (kedtest)	Port: 2 (w	iphy0) 🔻
B	VLAN ID:		DHCP-IPv4			
•	Parent MAC:	00:0e:8e:43:36:e9	DHCP Client ID:	-		
	MAC Addr:	00:10:26:02:00:01 💌	IP Address:	10.26.2.1	Global IPv6:	AUTO
	Quantity:	1	IP Mask or Bits:	255.255.240.0	Link IPv6:	AUTO
			Gateway IP:	10.26.1.3	IPv6 GW:	AUTO
	#1 Redir Name:		#2 Redir Name:			
	STA ID:	0	SSID:	limited-AP]
	WiFi AP:		Key/Phrase:	limited-AP1]
	Use WPA	✓ Use WPA2	Use WEP			
4	Down					
	Apply	<u>C</u> ancel	de est dese ti	and the design of the set		
A	. Select WiFi V	AP				

- B. Enter a MAC address: 00:10:26:02:00:01
- C. Quantity is 1
- D. IP of 10.26.2.1
- E. Let's use a typical subnet mask: 255.255.255.0
- F. Gateway IP will be from eth1: 10.26.1.3
- G. We will setup WPA2 with the SSID limited-AP and Key/Phrase limited-AP1
- H. Click Apply to commit.
- I. Click **Cancel** to close the window.

D. Now craft a second virtual AP. In the **Ports** tab, select wiphy1 and click **Create**.

٤			Create VLANs o	on Port: 1.1.3		+ _ □ ×
0	○ MAC-VLAN ○ WiFi STA ④	○ 802.1Q-VLAN ○ Re ● WiFi VAP ○ WiFi Moni	direct 🔾 Bridge itor	○ GRE Tunnel		
2	Shelf:	1	Resource:	1 (kedtest) 🔻	Port: 3 (w	iphy1) 🔻
B	VLAN ID:		DHCP-IPv4			
	Parent MAC:	00:0e:8e:43:3a:62	DHCP Client ID:			
	MAC Addr:	00:10:26:03:00:01 💌	IP Address:	10.26.3.1	Global IPv6:	AUTO
	Quantity:	1	IP Mask or Bits:	255.255.255.0	Link IPv6:	AUTO
			Gateway IP:	10.26.1.3	IPv6 GW:	AUTO
	#1 Redir Name:		#2 Redir Name:			
	STA ID:	1	SSID:	limited-AP]
	WiFi AP:		Key/Phrase:	limited-AP1]
	Use WPA	✓ Use WPA2	Use WEP			
4	Down <u>A</u> pply	<u>C</u> ancel		N:		
A	. Select WiFi V	AP				

- B. Enter a MAC address: 00:10:26:03:00:01
- C. Quantity is 1
- D. IP of 10.26.3.1
- E. And a typical **subnet mask** of **255.255.255.0**
- F. Gateway IP will be from eth1: 10.26.1.3
- G. We will setup WPA2 with the SSID limited-AP and Key/Phrase limited-AP1
- H. Click Apply to commit.
- I. Click **Cancel** to close the window.
- E. We now have two virtual access points on two radios on separate channels. Each is on their own subnet. Now we limit the number of stations that can connect to them.

<u>\$</u>	LANforge Ma	anager Versi	on(5.2.11					↑ _ □	×	
<u>Control Reporting Tear-Off</u> Info Plugins										
		Sto	p All	Restart	Manager		Refresh	HEL	LP	
						1			_	
Layer-4 Generic Test Mgr Test Group Resource Mgr PPP-Links Event Log Alerts Port Mgr Messages										
Status Layer-3 L3 Endps VolP/RTF	VoIP/RTP En	dps Armage	ddon W	/anLinks	Attenuato	rs Coll	ision-Domai	ns File-I	0	
Disp: 192.168.100.27:0.0 Sniff Packets Clear Counters Reset Port Delete										
Rpt Timer: medium (8 s) 🔻	Apply	View [Details	Create	Mo	dify E	atch Modify	-		
	All Ethernet Interfaces (Ports) for all Resources.									
Port Pha Down IP SEC	Alias RX By	ytes RX Pkts	Pps RX	bps RX	TX Bytes	TX PKts	Ppsix	bps IX	Co	
1.1.0	eth0 215	,641 1,852	5	4,841	1,437,091	1,572	4	31,513		
1.1.1 🗌 🗌 10.26.1.3 0	ethl 3	,234 21	0	75	532	6	0	0		
1.1.2 0.0.0.0 0	wiphy0 43,03	37, 284,906	3,025,030	3,655,668	1,659,0	258,114	2,740,568	140,924	6,4	
1.1.3 0.0.0.0 0	wiphy1	0 0	0	0	0	0	0	0		
1.1.4 0.0.0.0 0	wiphy2	0 0	0	0	0	0	0	0	_	
1.1.5 🗌 10.26.2.1 0	vap0	0 0	0	0	684	7	0	141		
1.1.6 10.26.2.2 0	vapl	0 0	0	0	576	6	0	119		
Logged in to: kedtest:4002 as: Admin										

F. In the Ports tab, hightlight endpoints vap0 and vap1 and click Modify

🛃 vap0 (kedtest.candelatech.com) Configure Settings	🖬 vap1 (kedtest.candelatech.com) Configure Settings + - 🗆 >
Port Status Information	Port Status Information
Current: LINK-UP GRO_NONE	Current: LINK-UP GRO NONE
Driver Info: Port Type: WIFI-AP Parent: wiphy0	Driver Info: Port Type: WIFI-AP Parent: wiphyl
Port Configurables	Port Configurables
Standard Configuration Advanced Configuration	Standard Configuration Advanced Configuration
Enable — General Interface Settings	Enable General Interface Settings
Set IP Info DHCP-IPv6 DHCP Release Down Aux-Mgt	Set IP Info DHCP-IPv6 DHCP Release Down Aux-Mgt
Set IP6 Info DHCP-IPv4 Secondary-IPs DHCP Client ID: None	Set IP6 Info DHCP-IPv4 Secondary-IPs DHCP Client ID: None
DNS Servers: BLANK Peer IP: NA	DNS Servers: BLANK Peer IP: NA
Set MAC IP Address: 10.26.2.1 Global IPv6: AUTO	Set MAC IP Address: 10.26.3.1 Global IPv6: AUTO
Set TX Q Len IP Mask: 255.255.255.0 Link IPv6: AUTO	Set TX Q Len IP Mask: 255.255.05 Unk IPv6: AUTO
Gateway IP: 10.26.1.3 IPv6 GW: AUTO	Gateway IP: 10.26.1.3 IPv6 GW: AUTO
Set Offload Alias: MTU: 1500	Alias: MTU: 1500
Set PROMISC MAC Addr: 00:10:26:02:00:01 TX Q Len 1000	AC Addr: 00:10:26:03:00:01 TX Q Len 1000
	Services Rpt Timer: faster (1 s) ViFi Bridge: NONE
HTTP WIFI Settings	HTTP WiFi Settings
FTP SSID: Limited-AP VAP: DEFAULT	FTP SSID: limited-AP V AP: DEFAULT
Low Level Key/Phrase: limited-AP1 Mode: 802.11abgn	▼ Low Level Key/Phrase: limited-AP1 Mode: 802.11abgn ▼
PROMISC Freq/Channel: 5180/36 Rate: OS Default	PROMISC Freq/Channel: 5220/44 Rate: OS Default
TSO Enabled RTS: -1 Tx-Power: 17 dBm	TSO Enabled RTS: -1 Tx-Power: 17 dBm
UFO Enabled DTIM-Period: 2 Max-STA: 10	UFO Enabled DTIM-Period: 2 Max-STA: 10
GSO Enabled Beacon: 240 Frag: 2346	GSO Enabled Beacon: 240 Frag: 2346
LRO Enabled Use WPA 🗹 Use WPA2 Use WEP Disable HT40 Disabl	le SGI LRO Enabled Use WPA 🗹 Use WPA 2 Use WEP 🗋 Disable HT40 🗋 Disable SGI
GRO Enabled Verbose Debug	GRO Enabled Verbose Debug
Print View Details Logs Probe Display Scan Sync Apply	OK Print View Details Logs Probe Display Scan Sync Apply OK Cancel

- A. At the bottom of the Port Configure Settings window for vap0, change Max-STA to 10
- B. Click **OK**
- C. Repeat this for vap1
- 2. We now have two virtual access points that can both accept a small number of stations. We put them on different subnets because configuring DHCP on each VAP is simpler than adding a bridge device..
- 3. Let's proceed to configuring **DHCP** for the 10.26.2.0/24 and 10.26.3.0/24 networks.
- 4. In the **Status** tab, click on **Netsmith**

\$	LANforge Manager Vers	ion(5.2.11)		+ _ □ ×				
<u>Control Reporting Tear-Off</u> Info E	lugins							
	Stop	All Resta	art Manager	Refresh HELP				
Layer-4 Generic Test Mgr Te Status Layer-3 L3 Endps	st Group Resource Mgr PPP-Links VolP/RTP VolP/RTP Endps Armage	Event Log Alerts ddon WanLinks	S Port Mgr Messa Attenuators C	ges Collision-Domains File-10				
License Info	Current Users	1	Test Configuration D	Database				
Licenses expire in: 359 days.	* Admin from:192.168.100.27 gnuserver from:127.0.0.1	List:	day_49	Load				
		Name:		Delete				
Sunnort expires in: 359 days	Load Behavior:	Choose One	Save					
			Download DB	Show Progress				
	Virtual She	lf 1						
	Resource	1						
Netsmith								
Logged in to: kedtest:4002 as: Ad	min							

A. Arrange your ports in the Netsmith windows and click Apply

<u>ی</u>	Netsmit	th configuration	n for Resource	: kedtes	.candelate	ch.com((1.1) Version: 5.2	2.11	¢	_ 0	×
			Virtual	Routers a	nd Connectio	ons					
0	M 1	lgt-eth0 92.168.100.42/24	wiphy0	wi	phyl	wiphy2					=
	et 10	h1).26.1.3/24	vap0 10.26.2	va .1/24 10	apl 0.26.3.1/24	-					
•										•	Ĩ_
🖌 WanL	inks	Show Legend	✓ Fire	✓ IPv4s	Info	Print	Sync	Apply		Close	
🖌 WanL	ink Names	Port Names	🖌 Fire Names	Zero-IP	V4s Apply Pro	ogress:	100% Complete		Cance	el Apply	,
✓ Peer ✓ WanL	WanLinks Link Config	Parents	🗹 Col. Domains	IPv6s	Netsmith	Status:	ОК				

B. Select vap0 and right click, choose Modify



C. Enable the DHCP pool and the Next-hop for the port

<u>الم</u>	Create/Modi	y Connection	↑ □ ×
Port 1-A:	5 (vap0) 🗖	Interface-Cost:	1
Port 1-B: 🖌 Skip	<auto create="" new="" port=""></auto>	RIP-Metric:	1
WanLink: 🔽 Skip	<auto create="" new="" wanlink=""> 🔻</auto>	OSPF Area:	0.0.0.0
Port 2.P. Skin	<auto create="" new="" ports<="" td=""><td>VRRP IP:</td><td>0.0.0/24</td></auto>	VRRP IP:	0.0.0/24
ronze, Mont		VRRP ID:	1
Port 2-A: 🗹 Skip	<auto create="" new="" port=""></auto>	VRRP Priority:	100
DHCP Lease Time:	120	VRRP Interval:	1
DHCP DNS:	0.0.0.0	Next-Hop:	10.26.1.3
DHCP Range Min:	10.26.2.10	Subnets (a.b.c.d/xx):	
DHCP Range Max:	10.26.2.250	0.0.0/0	
DHCP Domain:			
DHCPv6 DNS:			
DHCPv6 Range Min:			
DHCPv6 Range Max:			, <u>, </u>
DHCPd Config File:			
NAT 🗹 DHCP	DHCPv6 Custom DHC	CP VRRP Cand-RP	

- A. Select DHCP
- B. Set DHCP Lease Time to 120
- C. Set DHCP Range Min to 10.26.2.10
- D. Set DHCP Range Max to 10.26.2.250
- E. Set Next-Hop to 10.26.1.3
- F. Add **Subnet** 0.0.0/0
- G. Click **OK**
- D. Click **Apply** in the Netsmith window to commit the changes to LANforge. If you do not, these changes will disappear.
- E. In the Netsmith window, select vap1 and right click, choose Modify

🙆 Ne	tsmith configuration f	or Resource:	kedtest.ca	andelatech.com(1.1) Version: 5.2.11 🔹 🔹 🗆	×
		Virtual	Routers and (Connections	1
Q Q	Mgt-eth0 ■	wipl	hy0	wiphyl	=
	_eth1	vap	0	vapl	
		-		Display WanLink & WanPaths	
				Connect	Н
	wiphy2			Modify	
				Toggle WanLink	
				Modify WanLink	
				Modify Port	
				Create Ports	
				Beset Port	
				Delete Port	
				Delete WanLink	•
•				Delete	_
WanLinks	🔄 Show Legend 📝	Fire	IPv4s	Inito Print Sync Apply Close	
WanLink N	ames 🗹 Port Names 🛛 🖌	Fire Names	Zero-IPv4s	^S Apply Progress: 100% Complete Cancel Apply	
Peer WanL	inks 🔽 Parents 🛛 🔽	Col. Domains	IPv6s	Netsmith Status	
WanLink Co	onfig				

F. Configure the DHCP pool and the Next-hop for vap1

<u></u>	Create/Modif	y Connection	↑ □ ×
Port 1-A:	6 (vapl) 💌	Interface-Cost:	1
Port 1-B: 🗹 Skip	<auto create="" new="" port=""> 🛛 🔻</auto>	RIP-Metric:	1
WanLink: 🔽 Skip	<auto create="" new="" wanlink=""> 💌</auto>	OSPF Area:	0.0.0.0
Port 2.P. Skip	<auto create="" new="" ports<="" td=""><td>VRRP IP:</td><td>0.0.0/24</td></auto>	VRRP IP:	0.0.0/24
ron 2-b. 💌 Skip		VRRP ID:	1
Port 2-A: 🗹 Skip	<auto create="" new="" port=""></auto>	VRRP Priority:	100
DHCP Lease Time:	120	VRRP Interval:	1
DHCP DNS:	0.0.0.0	Next-Hop:	10.26.1.3
DHCP Range Min:	10.26.3.10	Subnets (a.b.c.d/xx):	
DHCP Range Max:	10.26.3.250	0.0.0/0	
DHCP Domain:			
DHCPv6 DNS:			
DHCPv6 Range Min:			
DHCPv6 Range Max:			
DHCPd Config File:			
NAT 🗹 DHCP	DHCPv6 Custom DHC	P VRRP Cand-RP	b :

- A. Select DHCP
- B. Set DHCP Lease Time to $120\,$
- C. Set DHCP Range Min to 10.26.3.10
- D. Set DHCP Range Max to 10.26.3.250
- E. Set Next-Hop to 10.26.1.3
- F. Add **Subnet** 0.0.0/0
- G. Click **OK**
- G. Click **Apply** in the Netsmith window to commit the changes to LANforge.
- H. We will create a virtual router to allow upstream traffic to reach the virtual access points:

🖆 Netsmitl	h configuration fo	Resource: kedtest	candelatech.com(1.1) Version: 5.2.11	+ - • ×
		——Virtual Routers a	nd Connections		^
¢ ¢	Mgt-eth0 ∎ ∎	wiphy0 vap0	wiphyl Yapl		E
w T	iphy2	New Router New Connection New Bridge			
•					•
✓ WanLinks	🗌 Show Legend 🖌 F	ire IPv4s	Info Print	Sync Apply	Close
🕑 WanLink Names	🖌 Port Names 🛛 🖌 F	ire Names 🛛 🗌 Zero-IP	v4s Apply Progress:	00% Complete	Cancel Apply
 Peer WanLinks WanLink Config 	🗹 Parents 🛛 🗹 C	ol. Domains 🔲 IPv6s	Netsmith Status: OK		

A. Right click in the Netsmith window and select New Router

B. You will see the Create/Modify Virtual Router window. We can use a default configuration.

\$	Create	/Modify Vi	rtual Route	ег			↑ □ X
Name: <a href="https://www.names-auto-complexity-comple</th> <th></th> <th>Width:</th> <th>100</th> <th></th> <th>Height:</th> <th>100</th> <th></th>		Width:	100		Height:	100	
Use OSPF 🔲 Multicast Routing 🔲 🛛	Jse OLSR 🛛 🗌	RIPv2 📃 RI	P Dflt Route	🗌 Xorp SHA	🗌 IPv6 Rou	ter 📃 IPv6 I	RADV
Use Existing Cfg 🛛 BGP Router 🗌 BGP 4B AS 📄 BGP Reflector 📄 BGP Confederation 📄 BGP Damping							
	No	tes about thi	s Virtual Rou	iter			
BGP Configuration Information							
Router ID 0.0.0	0 Local A	4S		Cluster ID			
Confederation ID 0	Dampi	ng Half Life		Damping Max	Suppress 3		
Damping Reuse 3	Dampi	ng Suppress					
BGP Peer Flags	Peer AS	Peer ID	Local Iface	Nexthop	Nexthop6	Hold Time	Delay Open
Active Client Confed VCas	t O						
Active Client Confed 🖌 Ucas	t 0						
Active Client Confed 🗹 Ucas	t O						
Active Client Confed 🗹 Ucas	t O						
Active Client Confed 🗹 Ucas	t O						
Active Client Confed 🗹 Ucas	t O						
Active Client Confed 🗹 Ucas	t O						
Active Client Confed 🗹 Ucas	t O						
		ОК	Cancel				

C. Click **OK** to save a default router



D. Drag the endpoints vap1, vap1 and eth1 into the virtual router, then click Apply in the Netsmith window.

4	Netsmith configurati	on for Resource: kedtest.candelatech.com(1.1) Version: 5.2.11	↑ _ □ ×
	~		^
	2		
	Mgt-eth0	wiphy0 wiphy1	
6	₹	T /	
			=
	wiphy2	RO(NA)	
		vap0 vap1	
		ethl	
•			
~	WanLinks 📃 Show Legen	d 🗹 Fire 🗌 IPv4s Info Print Sync Apply	Close
~	WanLink Names 🗹 Port Names	✓ Fire Names Zero-IPv4s Apply Progress: 100% Complete Ca	ncel Apply
	Peer WanLinks 🛛 🗹 Parents	Col. Domains IPv6s	
V	WanLink Config	Netsmith Status: OK	

E. We can verify outbound traffic using the following **ping** command. Open a terminal on the LANforge system and run **ping** -I 10.26.3.1 10.26.1.2

root@kedtest:/home/lanforge - Terminal	+ _ □ ×
정 않는 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 많은 것 같이 있다.	
root@kedtest /home/lanforge 🦡	
> ping -I 10.26.3.1 10.26.1.2	
PING 10.26.1.2 (10.26.1.2) from 10.26.3.1 : 56(84) bytes of data.	
64 bytes from 10.26.1.2: icmp_seq=1 ttl=64 time=0.242 ms	
64 bytes from 10.26.1.2: icmp_seq=2 ttl=64 time=0.288 ms	
64 bytes from 10.26.1.2: icmp_seq=3 ttl=64 time=0.281 ms	
64 bytes from 10.26.1.2: icmp_seq=4 ttl=64 time=0.289 ms	
^C	
10.26.1.2 ping statistics	
4 packets transmitted, 4 received, 0% packet loss, time 2999ms	
rtt min/avg/max/mdev = 0.242/0.275/0.289/0.019 ms	
김 정도는 것 같은 것이 많은 것이 같이 같이 같이 같이 같이 같이 같이 많이	
root@kedtest /home/lanforge	

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